

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



SW

September 14, 2006

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Mr. Don Kahler
Pleasanton Gravel Company
501 El Charro Road
Pleasanton, CA 94566

Subject: Fuel Leak Site Case Closure, Airdance Farm LLC, 770 El Charro Road, Pleasanton, CA 94588;
Case No. RO0002539

Dear Mr. Kahler:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Residual concentrations of up to 150 milligrams per kilogram (mg/kg) of Total Petroleum Hydrocarbons as diesel remain in soil at the site.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

Donna L. Drogos, P.E.
LOP and Toxics Program Manager

Enclosures:

1. Remedial Action Completion Certificate
2. Case Closure Summary

cc:

Ms. Cherie McCaulou (w/enc)
SF- Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Toru Okamoto (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120

Mr. Mark Arniola (w/enc)
Lowney Associates
167 Filbert Street
Oakland, CA 94607-2531

Ms. Colleen Winey, QIC 80201 (w/enc)
Zone 7 Water Agency
100 North Canyons Parkway
Livermore, CA 94551

Jerry Wickham (w/orig enc), D. Drogos (w/enc), R. Garcia (w/enc)

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HEALTH CARE SERVICES

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JW

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REMEDIAL ACTION COMPLETION CERTIFICATE

Dear Mr. Kahler:

Subject: Fuel Leak Site Case Closure, Airdance Farm LLC, 770 El Charro Road, Pleasanton, CA 94588;
Case No. RO0002539


This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact our office if you have any questions regarding this matter.

Sincerely,


William Pitcher
Interim Director
Alameda County Environmental Health

Amie Levi
for

**CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM**

I. AGENCY INFORMATION

Date: September 14, 2006

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Airdance Farm LLC		
Site Facility Address: 770 El Charro Road, Pleasanton, CA 94588		
RB Case No.: 01-3546	Local Case No.:	LOP Case No.: RO0002539
URF Filing Date: 04/10/2003	SWEEPS No.: ---	APN: 946-1350-4
Responsible Parties	Addresses	Phone Numbers
Don Kahler, Pleasanton Gravel Company	P.O. Box 850, Pleasanton, CA 94566	925-455-9000 x244

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	1,000 gallons	Diesel	Removed	02/21/2003
2	1,000 gallons	Gasoline	Removed	02/21/2003
3	1,000 gallons	Diesel	Removed	02/21/2003
Piping			Removed	02/21/2003

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: No holes, cracks, or other signs of failure were observed in the tanks during removal or tanks 1 and 2. Tank 3 had several holes up to 1/2 inch in diameter in the upper half of the tank and a 2 and 1/2-inch diameter hole in the bottom of the tank.	
Site characterization complete? Yes	Date Approved By Oversight Agency: ----

Monitoring wells installed? No	Number: 0	Proper screened interval? --
Highest GW Depth Below Ground Surface: 49 feet	Lowest Depth: 49 feet	Flow Direction: Assumed to west based on regional information
Most Sensitive Current Use: Drinking water source.		

Summary of Production Wells in Vicinity: The nearest water supply well is located approximately 300 feet west (downgradient) of the site. Based on the absence of petroleum hydrocarbons in groundwater beneath the tanks, the low levels of residual soil contamination, and the depth to groundwater (approximately 50 feet bgs), the well is not expected to be a receptor for the site.	
Are drinking water wells affected? No	Aquifer Name: Amador Subbasin of Livermore-Amador Basin
Is surface water affected? No	Nearest SW Name: Arroyo Mocho Canal is approximately 150 feet south of site.
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health and Livermore-Pleasanton Fire Department

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	3 – 1,000 gallon tanks	Transported to Ecology Control Industries in Richmond, CA for disposal	02/21/2003
Piping	Not reported	Transported to Ecology Control Industries in Richmond, CA for disposal	02/21/2003
Free Product	None	--	--
Soil	195 tons	Transported to Newby Island Sanitary Landfill in Milpitas, CA for disposal.	02/23/2003
Groundwater	None	--	--

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
 (Please see Attachments 1 through 7 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	8,800(1)	<1	<0.1	<0.1
TPH (Diesel)	150	150	<0.05	<0.05
Oil and Grease	NA	NA	NA	NA
Benzene	<0.005	<0.005	<1	<1
Toluene	0.0087	<0.005	<1	<1
Ethylbenzene	0.02	<0.005	<1	<1
Xylenes	.14	<0.005	<2	<2
Total Lead	9.6(2)	9.6(2)	NA	NA
MTBE	<0.01(3)	<0.01(3)	<3(4)	<3(4)
Other (8240/8270)	NA	NA	NA	NA

- (1) Composite soil sample from soil stockpile.
 (2) Lead was detected in soil at concentrations ranging from 4.5 to 9.6 ppm.
 (3) MTBE < 0.01 ppm; DIPE, ETBE, TAME, TBA, EDB, and EDC <0.01 ppm in soil.
 (4) MTBE <3 ppb; ETBE, TAME, and DIPE <1 ppb; EDB <0.1 ppb; EDC <0.05 ppb in groundwater.

Site History and Description of Corrective Actions:

The site is currently used for horse stables. Three 1,000-gallon underground storage tanks (UST) were reportedly used in the 1950s for storage of gasoline and diesel fuel for agricultural purposes. No holes, cracks, or other evidence of a release was observed on Tanks #1 (diesel) and #2 (gasoline) during tank removal in February 2003. Holes up to ½-inch in diameter were observed in the upper half of Tank #3 (diesel) and an approximately 2 and ½-inch diameter hole was observed on the bottom of Tank #3. Concentrations of up to 150 ppm of total petroleum hydrocarbons as diesel (TPHd) were detected in soil beneath Tank #3. TPH as gasoline was detected in the soil stockpile at concentrations up to 8,800 ppm. Approximately 195 tons of soil was removed from the site for off-site disposal. Groundwater was not encountered in the tank pit excavations.

Two soil borings were advanced at the site on April 12 and 13, 2006 to investigate soil and groundwater quality beneath the site. One boring was advanced in the former tank pit for Tank #1 and the second boring was advanced in the former tank pit for Tanks #2 and #3. Grab groundwater samples were collected from the first encountered groundwater beneath each tank pit. TPHg, TPHd, BTEX, fuel oxygenates, EDB, and EDC were not detected in any of the soil or groundwater samples collected. Lead was detected in soil samples at concentrations ranging from 4.5 to 9.6 ppm.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? --		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? --		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: --	Number Decommissioned: 0	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

V. ADDITIONAL COMMENTS, DATA, ETC.

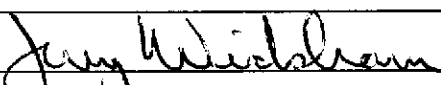
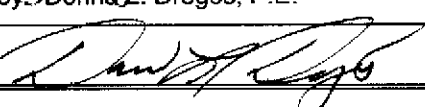
Considerations and/or Variances:

None.

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham	Title: Hazardous Materials Specialist
Signature: 	Date: 08/31/06
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: 	Date: 08/31/06

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB:
Signature: <i>Cherie McCaulou</i>	Date: 9/8/06

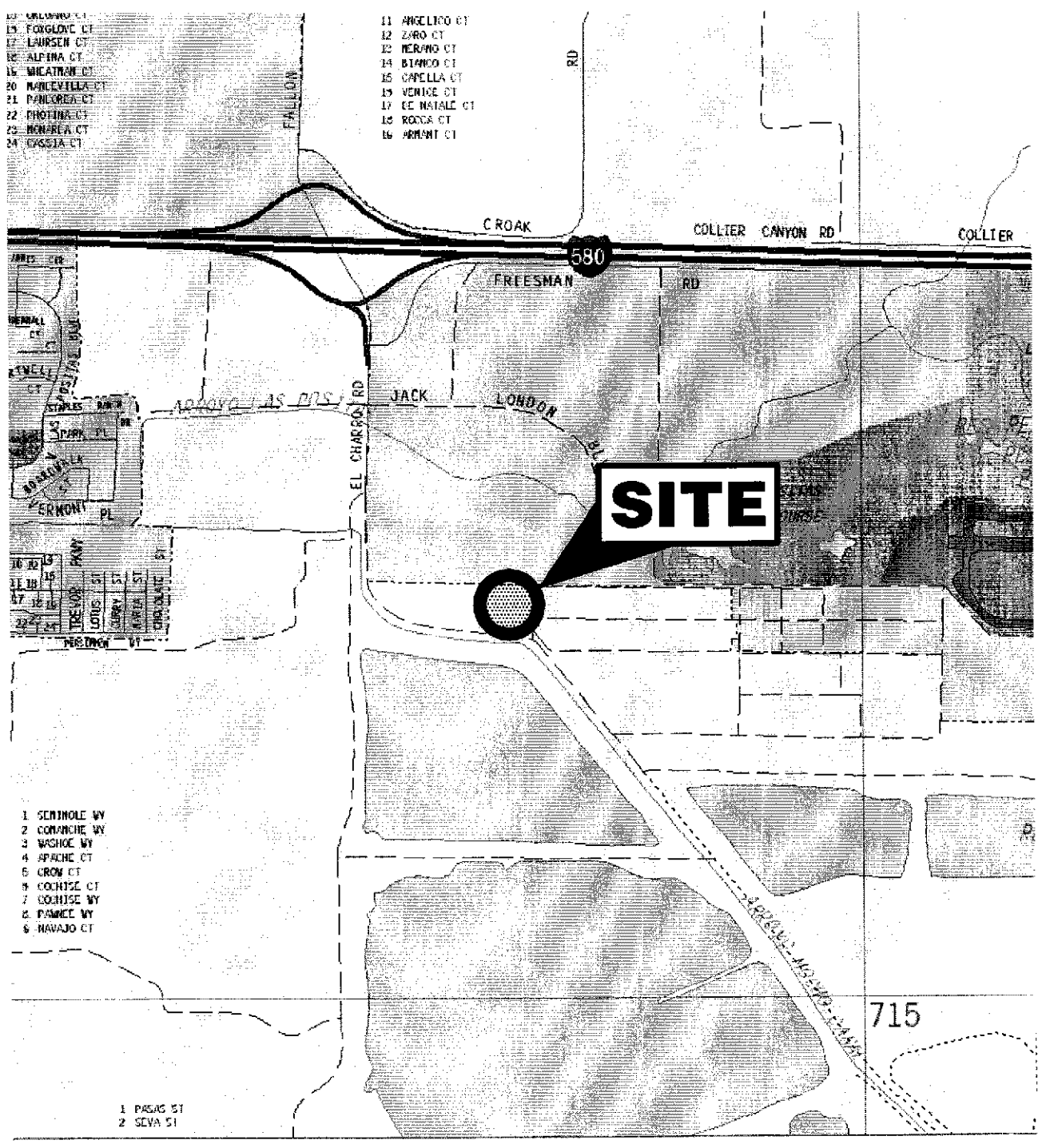
VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: NA	Date of Well Decommissioning Report: NA	
All Monitoring Wells Decommissioned: ---	Number Decommissioned: ---	Number Retained: ---
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: NA		
ACEH Concurrence - Signature: <i>Jay Williams</i>	Date: 09/08/06	

Attachments:

1. Vicinity Map
2. Site Plan and Soil Stockpile Sample Location Map
3. Site Plan and Boring Locations
4. Tank Removal Analytical Results Table
5. Soil Boring Soil and Groundwater Analytical Data
6. Boring Logs

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.



- 13. FORDHAM CT
- 14. FOXGLOVE CT
- 15. LAURSEN CT
- 16. ALPHEA CT
- 17. MICATHON CT
- 18. MANDEVILLE CT
- 19. PANDORA CT
- 20. PHOTINA CT
- 21. MONTEA CT
- 22. CASSIA CT

- 11. ANGELICO CT
- 12. ZARO CT
- 13. NERANO CT
- 14. BIARDO CT
- 15. CAPELLA CT
- 16. VENICE CT
- 17. DE NATALE CT
- 18. ROCCA CT
- 19. ARMIT CT

- 1. SCRIMOLE WY
- 2. COMANCHE WY
- 3. WASHOE WY
- 4. APACHE CT
- 5. CROWN CT
- 6. COURISE CT
- 7. COURISE WY
- 8. PARKER WY
- 9. NAVAJO CT

- 1 PASAG ST
- 2 SEVA ST

© 2000 Thomas Bros. Maps

303*EB

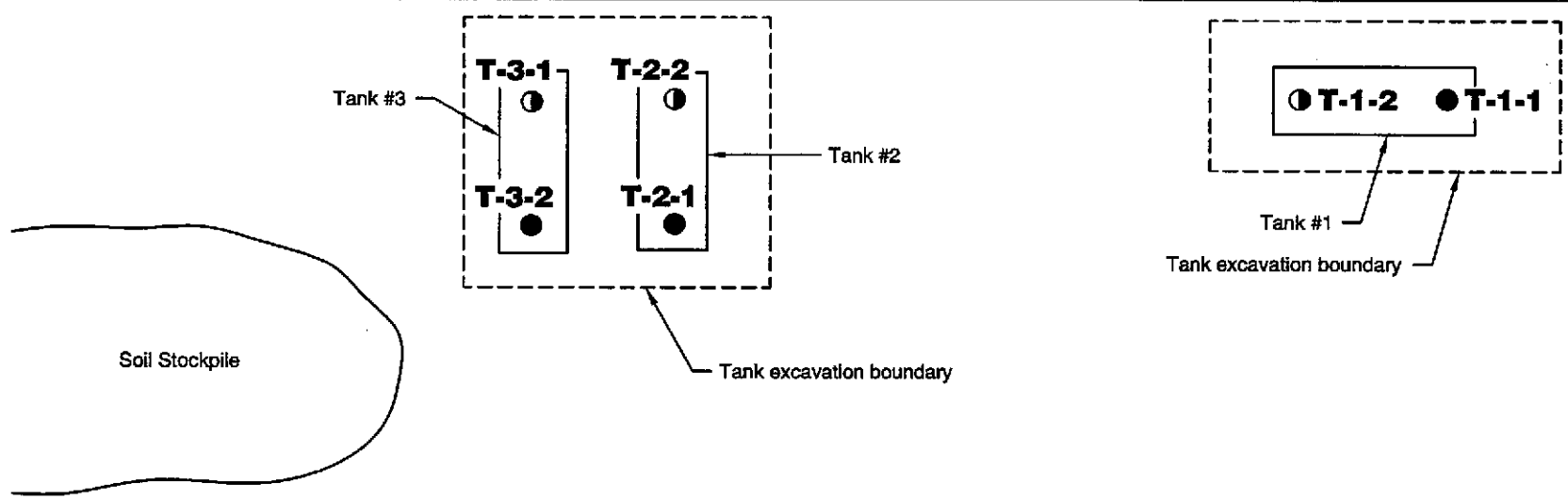
VICINITY MAP
 770 EL CHARRO ROAD
 Pleasanton, California

TRC Lowney

FIGURE 1
ATTACHMENT 1

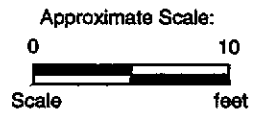


Barn/stables



LEGEND

- - Approximate location of fill end soil verification sample
- - Approximate location of non-fill end soil verification sample

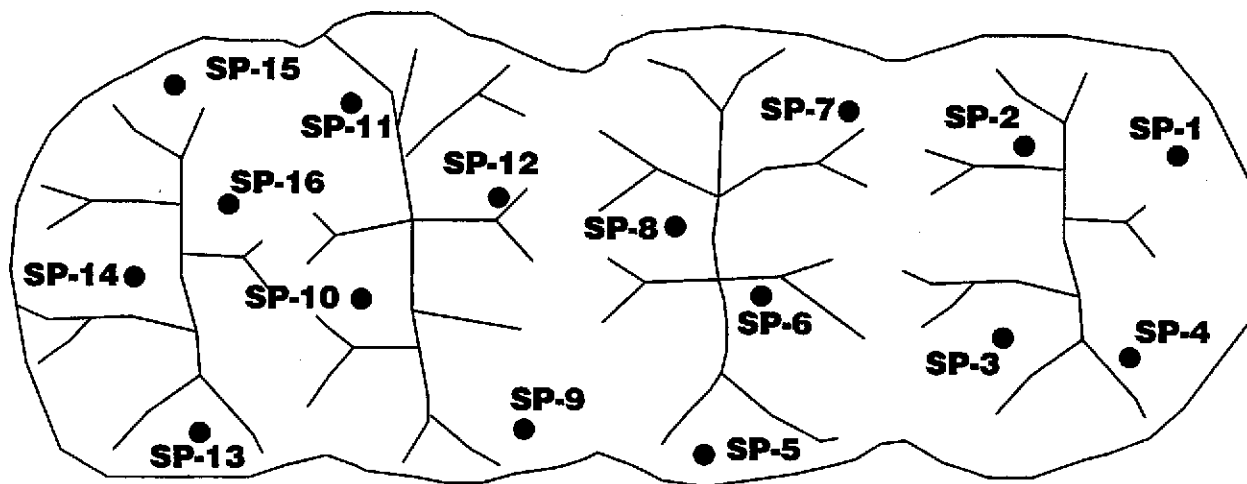


Base approximated from Lowney Associates field notes.

3/03'EB

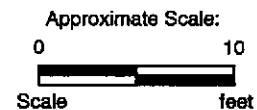
SITE PLAN
770 EL CHARRO ROAD
Pleasanton, California

ATTACHMENT 2



LEGEND

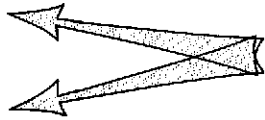
● - Approximate location of soil stockpile sample



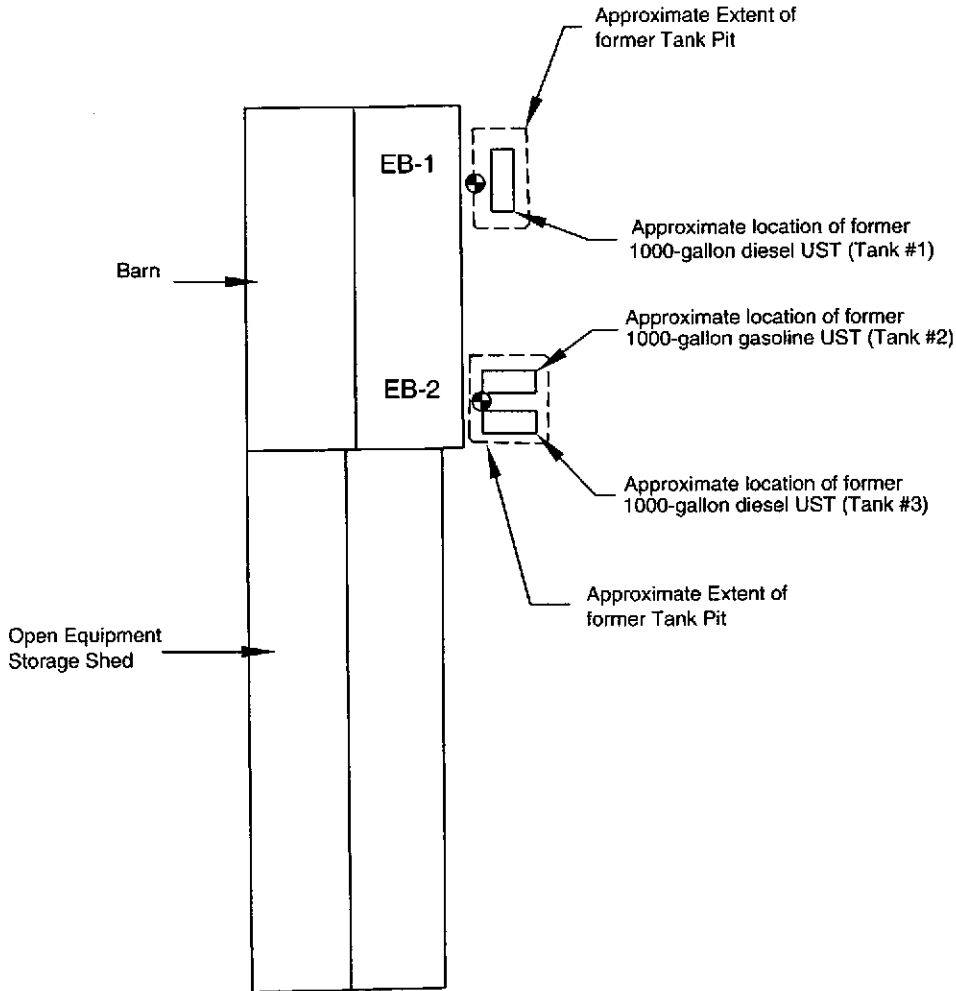
Base approximated from Lowney Associates field notes.

SOIL STOCKPILE SAMPLE LOCATION MAP

770 EL CHARRO ROAD
Pleasanton, California



APPROXIMATE RANGE OF
GROUND WATER FLOW
(based on Topography and
Geotracker Information)



LEGEND

⊕ - Approximate location of exploratory boring



Approximate Scale

SITE PLAN AND PROPOSED BORING LOCATIONS

770 EL CHARRO ROAD
Pleasanton, California

2.3.1 Laboratory Analyses

As requested by the ACDEH inspector and because the former tanks previously contained gasoline and diesel fuel, the soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and diesel (TPHd) with an additional scan for benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tertiary butyl ether (MTBE) (EPA Test Method 8015/8020); fuel oxygenates, including 1,1-DCA (EPA Test Method 8260); and total lead. Sampling protocol, and copies of the laboratory reports and chain of custody form are presented in Appendix B.

TABLE 2. Analytical Results of Selected Soil Samples (concentrations in parts per million)

Sample Number	Depth (feet)	Location	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes
T-1-1	7 ½	Tank#1 non-fill	1.0	<1.0	<0.005	<0.005	<0.005	<0.005
T-1-2	7 ½	Tank#1 fill-end	1.4	<1.0	<0.005	<0.005	<0.005	<0.005
T-2-1	10 ½	Tank#2 non-fill	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005
T-2-2	10 ½	Tank#2 fill-end	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005
T-3-1	11 ½	Tank#3 fill-end	59	<1.0	<0.005	<0.005	<0.005	<0.005
T-3-2	11 ½	Tank#3 non-fill	150	<1.0	<0.005	<0.005	<0.005	<0.005
SP-1,2,3,4	NA	Stockpile	5.0	<1.0	<0.005	0.0051	<0.005	<0.005
SP-5,6,7,8	NA	Stockpile	12	<1.0	<0.005	0.006	<0.005	<0.005
SP-9,10,11,12	NA	Stockpile	6.2	<1.0	<0.005	0.0087	<0.005	0.034
SP-13,14,15,16	NA	Stockpile	6.7	8,800	<0.000	0.0081	0.020	0.140

Sample Number	EDB	1,2 DCA	TBA	MTBE	DIPE	ETBE	TAME	Lead
T-1-1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	5.4
T-1-2	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	4.5
T-2-1	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	6.5
T-2-2	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	7.3
T-3-1	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	8.3
T-3-2	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	8.3
SP-1,2,3,4	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	5.8
SP-5,6,7,8	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	7.0
SP-9,10,11,12	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	8.8
SP-13,14,15,16	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	9.6

< Indicates that the compound was not detected at or above the stated laboratory reporting limit

2.4 Excavation Backfilling

Since petroleum hydrocarbons were detected in the excavated soil, imported material was used to backfill the UST excavation. Approximately 55 tons of ¾- inch diameter crushed rock and approximately 155 tons of ¾ -inch maximum diameter Class 2 aggregate base were imported to backfill the excavation.

Table 1A. Analytical Results of Selected Soil Samples
(concentrations in parts per million)

Boring Number	Depth (feet)	TPHg	TPHd	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
EB-1	14½~15	<0.10	<2.0	<0.010	<0.010	<0.010	<0.020	<0.010
EB-1	34½~35	<0.10	<2.0	<0.010	<0.010	<0.010	<0.020	<0.010
EB-1	49½~50	<0.10	<2.0	<0.010	<0.010	<0.010	<0.020	<0.010
EB-2	14½~15	<0.10	<2.0	<0.010	<0.010	<0.010	<0.020	<0.010
EB-2	34½~35	<0.10	<2.0	<0.010	<0.010	<0.010	<0.020	<0.010
EB-2	49½~50	<0.10	<2.0	<0.010	<0.010	<0.010	<0.020	<0.010
Residential ESL*		NE	NE	0.044	2.9	3.3	2.3	0.023
Industrial ESL*		NE	NE	0.044	2.9	3.3	2.3	0.023

< Indicates that the compound was not detected at or above the stated laboratory reporting limit
 * Environmental Screening Level, SFBRWQB Table A
 NE Not established

Table 1B. Analytical Results of Selected Soil Samples
(concentrations in parts per million)

Boring Number	Depth (feet)	EDB	EDC	ETBE	DIPE	TAME	t-Butanol
EB-1	14½~15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050
EB-1	34½~35	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050
EB-1	49½~50	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050
EB-2	14½~15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050
EB-2	34½~35	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050
EB-2	49½~50	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050
Residential ESL*		0.00033	0.0045	NE	NE	NE	0.073
Industrial ESL*		0.00033	0.0045	NE	NE	NE	0.073

< Indicates that the compound was not detected at or above the stated laboratory reporting limit
 * Environmental Screening Level, SFBRWQB Table A
 NE Not established

Table 2A. Analytical Results of Selected Ground Water Samples
(concentrations in parts per billion)

Well Number	Date	TPHg	TPHd	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
EB-1	4/13/06	<0.10	<0.05	<1.0	<1.0	<1.0	<2.0	<3.0
EB-2	4/13/06	<0.10	<0.05	<1.0	<1.0	<1.0	<2.0	<3.0
MCL*		NE	NE	1.0	150	700	1,750	13

< Indicates that the compound was not detected at or above the stated laboratory reporting limit
 * Drinking water Maximum Contaminant Levels—California DHS, September 12, 2003
 NE Not established

Table 2B. Analytical Results of Selected Ground Water Samples
(concentrations in parts per billion)

Well Number	Date	EDB	EDC	ETBE	DIPE	TAME	t-Butanol
EB-1	4/13/06	<0.10	<0.05	<1.0	<1.0	<1.0	<3.0
EB-2	4/13/06	<0.10	<0.05	<1.0	<1.0	<1.0	<3.0
MCL*		NE	0.50	NE	NE	NE	NE

< Indicates that the compound was not detected at or above the stated laboratory reporting limit

* Drinking water Maximum Contaminant Levels—California DHS, September 12, 2003

NE Not established

EXPLORATORY BORING: EB-1

Sheet 1 of 2

DRILL RIG:
BORING TYPE: ROTARY HOLLOW STEM AUGER
LOGGED BY: KLB
START DATE: 4-12-06 FINISH DATE: 4-12-06

PROJECT NO: 1888-1
PROJECT: EL CHARRO
LOCATION:
COMPLETION DEPTH: 55.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PID (ppm)	Undrained Shear Strength (ksf)
			SURFACE ELEVATION:							○ Pocket Penetrometer △ Torvane ● Unconfined Compression ▲ U-U Triaxial Compression 1.0 2.0 3.0 4.0
	0		Gravel cover		9	X				
	5		CLAY (CL) medium stiff, damp, brown, some gray silty mottling, no odor	CL					0.2	
	10		FAT CLAY (CH) stiff, damp, light brown, trace charcoal, no odor						2.8	
	15		some tan, gray mottling, trace pebbles		6	X				
	20		rounded pebbles 1-2 cm (40-50%)	CH						
	25				6	X				
	30		SILTY GRAVEL (GM) light brown, damp, 1 cm angular or fractured chert clasts	GM					3.1	

Continued Next Page

GROUND WATER OBSERVATIONS:

∇ : FREE GROUND WATER MEASURED DURING DRILLING AT 49.8 FEET

LA CORP.GDT 5/5/06 OAK*

EXPLORATORY BORING: EB-1 Cont'd

Sheet 2 of 2

DRILL RIG:
BORING TYPE: ROTARY HOLLOW STEM AUGER
LOGGED BY: KLB
START DATE: 4-12-06 FINISH DATE: 4-12-06

PROJECT NO: 1888-1
PROJECT: EL CHARRO
LOCATION:
COMPLETION DEPTH: 55.0 FT.

This log is a part of a report by Lowney Associates, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PID (ppm)	Undrained Shear Strength (ksf)								
										○ Pocket Penetrometer	△ Torvane	● Unconfined Compression	▲ U-U Triaxial Compression	1.0	2.0	3.0	4.0	
	30	[Symbol]	SILTY GRAVEL (GM) light brown, damp, 1 cm angular or fractured chert clasts	GM	6	[Symbol]			20.1									
	35	[Symbol]																
	40	[Symbol]	CLAY GRAVEL (GC) moist, light brown, 1 cm rounded and fractured clasts	GC					3.1									
	45	[Symbol]	wet		6	[Symbol]			13.7									
	50	[Symbol]	light brown sandy gravel, wet		6	[Symbol]			23.4									
	55		Bottom of Boring at 55 feet															
	60																	

GROUND WATER OBSERVATIONS:
▽ : FREE GROUND WATER MEASURED DURING DRILLING AT 49.8 FEET

LA CORP.GDI 5/5/06 OAK

EXPLORATORY BORING: EB-2

Sheet 1 of 2

DRILL RIG:
 BORING TYPE: ROTARY HOLLOW STEM AUGER
 LOGGED BY: KLB
 START DATE: 4-12-06 FINISH DATE: 4-12-06

PROJECT NO: 1888-1
 PROJECT: EL CHARRO
 LOCATION:
 COMPLETION DEPTH: 56.0 FT.

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ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PID (ppm)	Undrained Shear Strength (ksf)
			SURFACE ELEVATION:							
	0		SILTY GRAVEL (GM) moist, brown, no odor	GM		X				
	5					X				
	10		FAT CLAY (CH) stiff, brown, moist, trace charcoal, no odor	CH		X				
	15		trace rootlets, small pebbles			X			0	
	20		no rootlets			X			0	
	25		SILTY GRAVEL AND SAND (GM) damp, brown, fractured rounded pebbles, poorly sorted	GM		X			0	
	30					X				

Continued Next Page

GROUND WATER OBSERVATIONS:
 ∇ : FREE GROUND WATER MEASURED DURING DRILLING AT 49.2 FEET

LA CORP.GDT 5/5/06 OAK

EXPLORATORY BORING: EB-2 Cont'd

Sheet 2 of 2

DRILL RIG:
BORING TYPE: ROTARY HOLLOW STEM AUGER
LOGGED BY: KLB
START DATE: 4-12-06 FINISH DATE: 4-12-06

PROJECT NO: 1888-1
PROJECT: EL CHARRO
LOCATION:
COMPLETION DEPTH: 56.0 FT.

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ELEVATION (FT)	DEPTH (FT)	SOIL LEGEND	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PID (ppm)	Undrained Shear Strength (ksf)
										○ Pocket Penetrometer △ Torvane ● Unconfined Compression ▲ U-U Triaxial Compression 1.0 2.0 3.0 4.0
	30		SILTY GRAVEL AND SAND (GM) damp, brown, fractured rounded pebbles, poorly sorted moist, larger clasts (1-2 cm)						2.2	
	35					X			20.4	
	40					X			0.1	
	45		caliche clasts (3-4 cm)			X				
	50					X				
	55		Multi-colored coarse sand, wet, graded, sorted, fining upward SILTY GRAVEL AND SAND (GM) damp, brown, fractured rounded pebbles, poorly sorted Bottom of Boring at 56 feet	GM		X				
	60									

GROUND WATER OBSERVATIONS:
▽ : FREE GROUND WATER MEASURED DURING DRILLING AT 49.2 FEET

LA CORP.GDT 5/5/06 CAK*